

Results: In this population (mean age=77±6 years), OBP was too elevated ($\geq 140/90$ mmHg) in 82% of cases (527/643). HBPM's feasibility was excellent (95%, 611/643). 52% of HBPM were made by the patient and 46% by the caregiver. Among subjects with an elevated OBP (Mean SBP/SDP = $161\pm 16/85\pm 11$ mmHg), a WCH was observed in 36% of cases (190/257). Among subjects with normal OBP (Mean SBP/DBP = $124\pm 12/71\pm 10$ mmHg), masked hypertension was disclosed in 25% of cases (29/116). These prevalences were similar whether HBPM was made by the patient or the caregiver.

Conclusion: WCH and masked hypertension affected respectively one third and one fourth of our elderly cohort. These high prevalences advocate for a routinely use of HBPM in the elderly. A long term follow-up of our cohort will be conducted. So we will be able to determine the cardiovascular prognostic accuracy of HBPM and to evaluate if WCH and masked hypertension are risk factors for sustained hypertension among elderly people.

P1.45 PROGNOSTIC VALUE OF 24-H BLOOD PRESSURE VARIABILITY IN 7040 SUBJECTS FROM 6 POPULATIONS

T.W. Hansen¹, L. Thijs², J. Boggia³, Y. Li⁴, M. Kikuya⁵, K. Björklund-Bodegard⁶, T. Richart⁷, T. Ohkubo⁵, J. Jeppesen⁸, C. Torp. Pedersen⁸, L. Lind⁶, Y. Imai⁵, E. Sandoya⁹, H. Ibsen¹⁰, E. O'Brien¹¹, J.A. Staessen⁷.
¹Hvidovre University Hospital, Hvidovre, Denmark, ²The Studies Coordinating Centre, Division of Hypertension and Cardiovascular Rehabilitation, Departm, Leuven, Belgium, ³The Departamento de Fisiopatología, Hospital de Clínicas, Universidad de la República, Montevideo, Uruguay, ⁴The Center for Epidemiological Studies and Clinical Trials, Ruijin-Hospital, Shanghai Jiaotong Unive, Shanghai, China, ⁵The Tohoku University Graduate School of Pharmaceutical Science and Medicine, Sendai, Japan, ⁶The Section of Geriatrics, Department of Public Health and Caring Sciences, Uppsala, Sweden, ⁷The Department of Epidemiology, Maastricht University, Maastricht, The Netherlands, ⁸Copenhagen University Hospital, Copenhagen, Denmark, ⁹The Asociación Española Primera de Socorros Mutuos, Montevideo, Uruguay, ¹⁰Aarhus University and Division of Cardiology, Holbak Hospital, Holbak, Denmark, ¹¹Conway Institute of Biomolecular and Biomedical Research, University College Dublin, Dublin, Ireland

Objectives: Previous studies reported contradictory results on the relation between cardiovascular outcome and blood pressure (BP) variability, but were often insufficiently powered or limited to selected patients or systolic BP. We studied mortality and morbidity in relation to the 24 h BP variability in subjects randomly recruited from the general population.

Methods: We performed 24-h BP monitoring in 7040 subjects (mean age 57.1 years; 45.3% women) enrolled in 6 prospective population studies in Denmark (2018), Belgium (1086), Japan (1430), Sweden (1069), Uruguay (1093), and China (344). We assessed systolic and diastolic variability from BP readings in individual ambulatory recordings from the standard deviation (SD) and average real variability (ARV). We computed standardized hazard ratios (HR), while adjusting for cohort, 24-h BP and other cardiovascular risk factors.

Results: Over 10.7 years (median), total and cardiovascular mortality amounted to 1091 and 411 deaths, respectively. The incidence of fatal combined with nonfatal events was 934, 396, 527, and 396 for all cardiovascular events, stroke, cardiac and coronary events, respectively. After adjustment for cohort, age, sex, body mass index, smoking and drinking, serum total cholesterol, history of cardiovascular disease, diabetes mellitus, treatment with antihypertensive drugs, and 24-h BP a higher systolic ARV predicted ($p\leq 0.04$) total (HR, 1.10) and cardiovascular (1.12) mortality, and all fatal combined with nonfatal cardiovascular events (1.08), but not fatal combined with nonfatal stroke or cardiac and coronary events (≤ 1.03 ; $p\geq 0.08$). Higher diastolic ARV predicted ($p\leq 0.03$) total (1.12) and cardiovascular (1.21) mortality and all combined fatal and nonfatal events (≥ 1.10) with the exception of cardiac and coronary events (≤ 1.07 ; $p\geq 0.15$). Findings for SD were similar to those for ARV. Sensitivity analyses, in which we stratified by ethnicity, sex, age, previous history of cardiovascular disease, antihypertensive treatment, numbers of BP readings in individual BP recordings, night-to-day BP ratio, or from which we excluded one cohort at a time showed consistent results.

Conclusions: Short-term BP variability assessed from 24-h ambulatory recordings with intermittent BP readings contributes to risk stratification over and beyond the BP level and other cardiovascular risk factors. Our study firmly established BP variability as an independent cardiovascular risk factor.



European Society of Hypertension

19TH European Meeting on Hypertension

M I L A N
JUNE 12-16, 2009

ABSTRACT BOOK

Contents

Abstracts

Saturday, June 13, 2009	S1
Sunday, June 14, 2009	S151
Monday, June 15, 2009	S309

Author Index	S459
--------------------	------

Topic Index	S491
-------------------	------

This abstract book has been produced electronically by Elsevier B.V.

Every effort has been made to faithfully reproduce the abstracts as submitted. However, no responsibility is assumed by the organisers for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of the rapid advances in the medical sciences, we recommend that independent verification of diagnoses and drug dosages should be made.



European Society of Hypertension

Congress Venue
MIC, Milan Convention Centre
via Gattamelata 2, Milan

ORGANIZING SECRETARIAT



AIM Group

Rome Office:
Via Flaminia 1068, 00189 Rome (Italy)
Ph +39.06.33053.1
Fax +39.06.33053.249
Email esh2009@aimgroup.it
www.esh2009.com